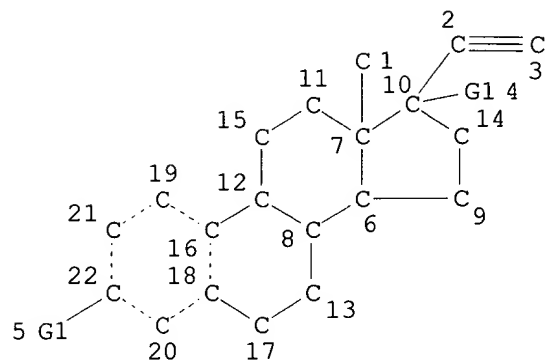


=> d que stat 157  
L44 STR



S~Ak  
@23 24

VAR G1=23/OH  
NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

L47	649	SEA	FILE=REGISTRY	SSS	FUL	L44
L50	33	SEA	FILE=REGISTRY	ABB=ON	L47 AND S=1	
L52	20	SEA	FILE=REGISTRY	ABB=ON	L47 AND S>1	
L53	53	SEA	FILE=REGISTRY	ABB=ON	L50 OR L52	
L54	48	SEA	FILE=REGISTRY	ABB=ON	L53 NOT "SULFONYL"	
L55	19	SEA	FILE=REGISTRY	ABB=ON	L54 AND NRS=1	
L56	1	SEA	FILE=REGISTRY	ABB=ON	L55 AND C23H30OS/MF	
L57	1	SEA	FILE=HCAPLUS	ABB=ON	L56	

=> d his 135-159

(FILE 'HCAPLUS' ENTERED AT 13:25:26 ON 09 OCT 2002)

FILE 'REGISTRY' ENTERED AT 13:53:51 ON 09 OCT 2002

L35 1308 S 4432.3.65/RID AND NRS=1 AND S=1  
L36 12 S L35 AND "ETHYNYL"  
L37 119 S 4432.3.65/RID AND NRS=1 AND S>1  
L38 0 S L37 AND "ETHYNYL"  
L39 110 S 4432.3.65/RID AND NRS=1 AND S=2  
L40 119 S L37 OR L39  
L41 1427 S L35 OR L37  
L42 1285 S L41 NOT "SULFONATE"  
L43 4 S L42 AND "ETHYNYL"  
L44 STRUCTURE *see d que stat L57, attached*  
L45 39 S L44  
L46 7 S L45 AND "ETHYNYL"  
L47 649 S L44 FULL  
L48 90 S L47 AND "ETHYNYL"  
L49 1 S L48 AND "THIO"  
L50 33 S L47 AND S=1  
L51 29 S L50 NOT "SULFONYL"  
L52 20 S L47 AND S>1  
L53 53 S L50 OR L52  
L54 48 S L53 NOT "SULFONYL"  
L55 19 S L54 AND NRS=1 *19 compds when narrowed down, but only 1 satisfies*  
L56 1 S L55 AND C23H30OS/MF *"thioether analogs" requirement*

FILE 'HCAPLUS' ENTERED AT 14:50:01 ON 09 OCT 2002

L57 1 S L56 *1 cat from CAPLUS - attached*

FILE 'CAOLD' ENTERED AT 14:51:13 ON 09 OCT 2002

L58 0 S L56 *Ocits from CA Old*

FILE 'BEILSTEIN' ENTERED AT 15:23:59 ON 09 OCT 2002

L59 0 S L57 *Ocits from Beilstein*

=&gt; d ibib abs hitstr 1

L57 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1975:497692 HCAPLUS

DOCUMENT NUMBER: 83:97692

TITLE: Steroids. 14. Sulfur-containing estratrienes

AUTHOR(S): Schwarz, S.; Weber, G.

CORPORATE SOURCE: Wiss. Lab., VEB Jenapharm, Jena, E. Ger.

SOURCE: Pharmazie (1975), 30(5), 277-80

CODEN: PHARAT

DOCUMENT TYPE: Journal

LANGUAGE: German

GI For diagram(s), see printed CA Issue.

AB Estrone dimethylthiocarbamate was hydrolyzed by alk. MeOH-H<sub>2</sub>O to give thioestrone (I) and the disulfide II (RR1 = O). I underwent successive NaBH<sub>4</sub> redn., S-alkylation with Me<sub>2</sub>CHBr, Oppenauer oxidn., and condensation with KC.tplbond.CH to give 3-(isopropylthio)-17-ethynylestra-1,3,5(10)-trien-17.β-ol (III). Oxidn. of 3-(isopropylthio)estra-1,3,5(10)-trien-17-one (IV) by excess H<sub>2</sub>O<sub>2</sub> and subsequent condensation with KC.tplbond.CH gave 3-(isopropylsulfonyl)-17-ethynylestra-1,3,5(10)trien-17.β-ol (V). The R- and S-isomers of VI were prepd. from IV by oxidn. with 1 equiv. H<sub>2</sub>O<sub>2</sub> and reaction with KC.tplbond.CH, and NaBH<sub>4</sub> redn. of I (RR1 = O) gave II (R = HO, R1 = H). III, R-VI, S-VI, and V possessed little or no antigonadotropic activity, but were post-coital contraceptives in rats with their activity decreasing in the order given. III also possessed anticholesteremic activity in rats.

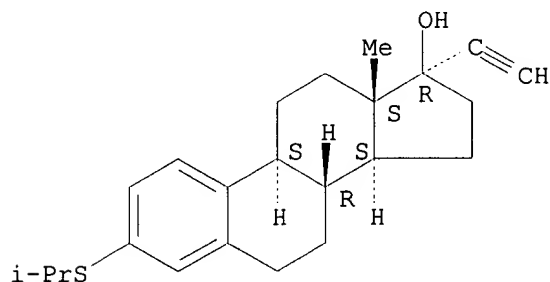
IT 56786-41-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and post-coital contraceptive activity of)

RN 56786-41-5 HCAPLUS

CN 19-Norpregna-1,3,5(10)-trien-20-yn-17-ol, 3-[(1-methylethyl)thio]-,  
(17.α.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



Peselev 09/675,323

09/10/2002

=> d ibib abs hitstr 1-2

L34 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:247354 HCAPLUS

DOCUMENT NUMBER: 134:261560

TITLE: Therapeutic treatment of androgen receptor driven conditions using steroids or analogs

INVENTOR(S): **Lardy, Henry A.; Marwah, Padma**

PATENT ASSIGNEE(S): Hollis-Eden Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 88 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001023405	A2	20010405	WO 2000-US26848	20000928
WO 2001023405	A3	20020530		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2000077363	A5	20010430	AU 2000-77363	20000928
EP 1228083	A2	20020807	EP 2000-967114	20000928
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				

PRIORITY APPLN. INFO.:  
 US 1999-157275P P 19990930  
 US 1999-157347P P 19990930  
 US 1999-166116P P 19991116  
 WO 2000-US26848 W 20000928

OTHER SOURCE(S): MARPAT 134:261560

AB A method is claimed to treat or prevent an androgen responsive disease in a subject, or to ameliorate one or more symptoms thereof, comprising administering to a subject, or delivering to the subject's tissues, an effective amt. of a steroid or steroid analogs. The steroid is specifically an analog of 1,3,5(10)-**estratriene-17.alpha.-ethynyl-3.beta.,17.beta.-diol**; 17.alpha.-**ethynylandrostene-3.beta.,17.beta.-diol**; 3.beta.,17.beta.-dihydroxyandrost-5-en-16-one; or 3.beta.-methylcarbonate-androst-5-en-7,17-dione. The androgen responsive disease is prostate cancer, benign prostatic hyperplasia, breast cancer, alopecia, acne, hypogonadism or hirsutism. The method further comprises administering to the subject a second therapy; the second therapeutic agent is hydroxyflutamide, leuprolide, megestrol, diethylstilbesterol, aminoglutethimide, spironolactone, tamoxifen, cyproterone acetate, or bicalutamide.

IT 57-63-6DP, analogs 1159-66-6DP, 3.beta.,17.beta.-Dihydroxyandrost-5-en-16-one, analogs 3604-60-2DP, analogs 250163-05-4DP, analogs

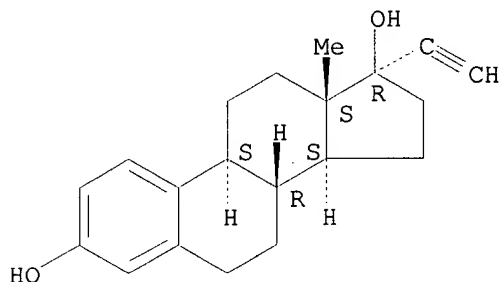
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(therapeutic treatment of androgen receptor driven conditions using  
steroids or analogs)

RN 57-63-6 HCAPLUS

CN 19-Norpregna-1,3,5(10)-trien-20-yne-3,17-diol, (17.alpha.)- (9CI) (CA  
INDEX NAME)

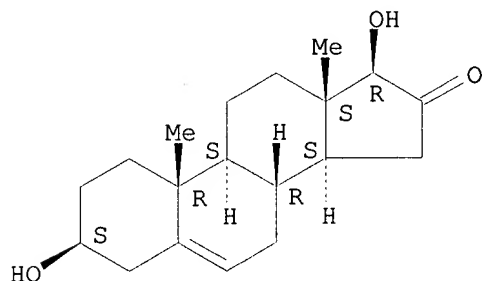
Absolute stereochemistry.



RN 1159-66-6 HCAPLUS

CN Androst-5-en-16-one, 3,17-dihydroxy-, (3.beta.,17.beta.)- (9CI) (CA INDEX  
NAME)

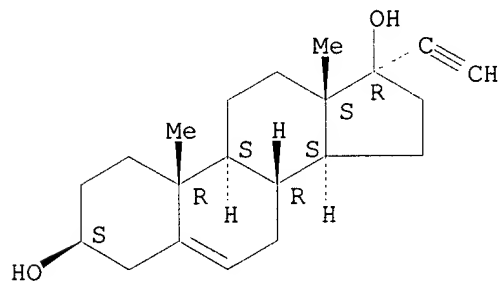
Absolute stereochemistry.



RN 3604-60-2 HCAPLUS

CN Pregn-5-en-20-yne-3,17-diol, (3.beta.,17.alpha.)- (9CI) (CA INDEX NAME)

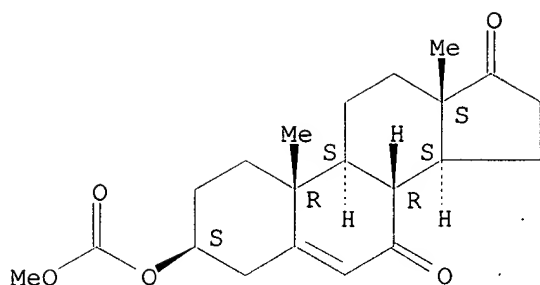
Absolute stereochemistry.



RN 250163-05-4 HCAPLUS

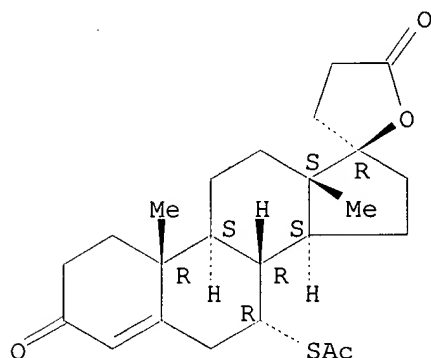
CN Androst-5-ene-7,17-dione, 3-[(methoxycarbonyl)oxy]-, (3.beta.)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.



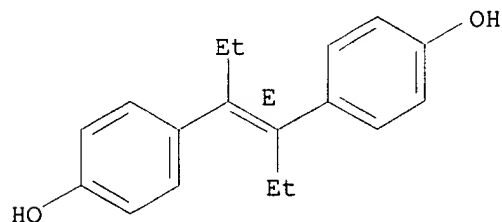
IT 52-01-7, Spironolactone 56-53-1 125-84-8,  
 Aminoglutethimide 427-51-0, Cyproterone acetate  
 3562-63-8 10540-29-1, Tamoxifen 52806-53-8,  
 Hydroxyflutamide 53714-56-0, Leuprolide 90357-06-5,  
 Bicalutamide  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES  
 (Uses)  
 (therapeutic treatment of androgen receptor driven conditions using  
 steroids or analogs in combination with a second therapeutic agent)  
 RN 52-01-7 HCAPLUS  
 CN Pregn-4-ene-21-carboxylic acid, 7-(acetylthio)-17-hydroxy-3-oxo-,  
 .gamma.-lactone, (7.alpha.,17.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



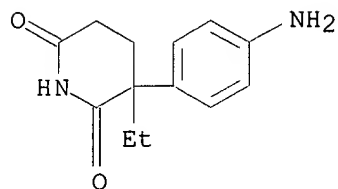
RN 56-53-1 HCAPLUS  
 CN Phenol, 4,4'-[(1E)-1,2-diethyl-1,2-ethenediyl]bis- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 125-84-8 HCAPLUS

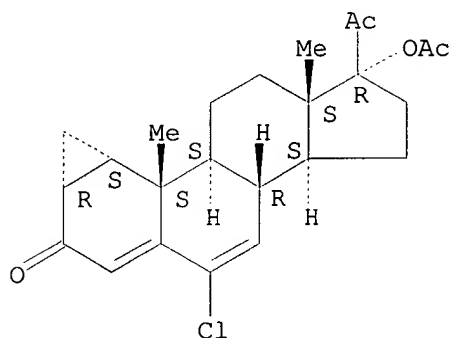
CN 2,6-Piperidinedione, 3-(4-aminophenyl)-3-ethyl- (9CI) (CA INDEX NAME)



RN 427-51-0 HCAPLUS

CN 3'H-Cyclopropa[1,2]pregna-1,4,6-triene-3,20-dione, 17-(acetyloxy)-6-chloro-1,2-dihydro-, (1.beta.,2.beta.)- (9CI) (CA INDEX NAME)

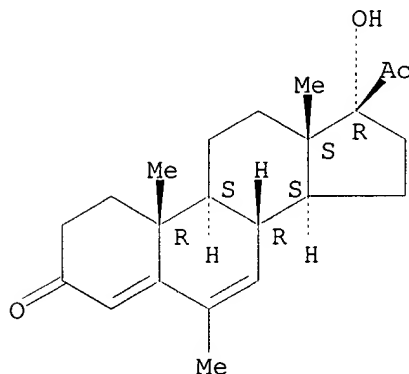
Absolute stereochemistry.



RN 3562-63-8 HCAPLUS

CN Pregna-4,6-diene-3,20-dione, 17-hydroxy-6-methyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

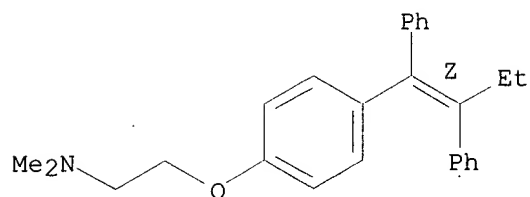
Absolute stereochemistry.



RN 10540-29-1 HCAPLUS

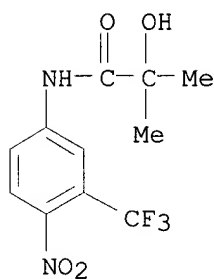
CN Ethanamine, 2-[4-[(1Z)-1,2-diphenyl-1-butenyl]phenoxy]-N,N-dimethyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 52806-53-8 HCAPLUS

CN Propanamide, 2-hydroxy-2-methyl-N-[4-nitro-3-(trifluoromethyl)phenyl]-  
(9CI) (CA INDEX NAME)

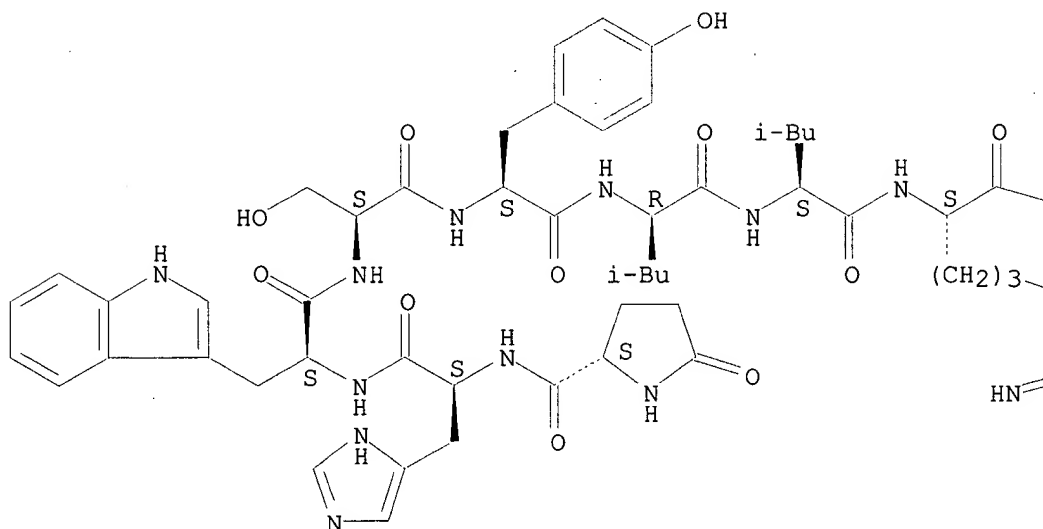


RN 53714-56-0 HCAPLUS

CN 1-9-Luteinizing hormone-releasing factor (swine), 6-D-leucine-9-(N-ethyl-L-prolinamide)- (9CI) (CA INDEX NAME)

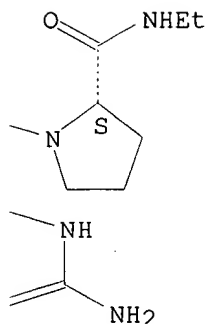
Absolute stereochemistry. Rotation (-).

PAGE 1-A

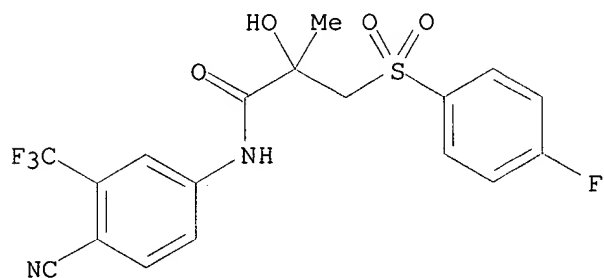




PAGE 1-B



RN 90357-06-5 HCAPLUS  
 CN Propanamide, N-[4-cyano-3-(trifluoromethyl)phenyl]-3-[(4-fluorophenyl)sulfonyl]-2-hydroxy-2-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:684497 HCAPLUS

DOCUMENT NUMBER: 131:332293

TITLE: Suppression of .DELTA.5-androstenediol-induced androgen receptor transactivation by selective steroids in human prostate cancer cells

AUTHOR(S): Chang, Hong-Chiang; Miyamoto, Hiroshi; **Marwah, Padma; Lardy, Henry**; Yeh, Shuyuan; Huang, Ko-En; Chang, Chawnshang

CORPORATE SOURCE: George Whipple Laboratory for Cancer Research, Departments of Pathology, Urology, Radiation Oncology, and the Cancer Center, University of Rochester Medical Center, Rochester, NY, 14642, USA

SOURCE: Proceedings of the National Academy of Sciences of the United States of America (1999), 96(20), 11173-11177  
 CODEN: PNASA6; ISSN: 0027-8424

PUBLISHER: National Academy of Sciences

DOCUMENT TYPE: Journal

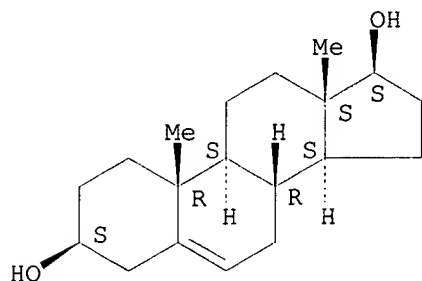
LANGUAGE: English

AB The authors' earlier report suggested that androst-5-ene-3.beta.,7.beta.-diol (.DELTA.5-androstenediol or Adiol) is a natural hormone with

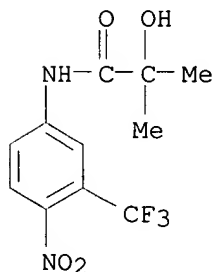
androgenic activity and that two potent anti-androgens, hydroxyflutamide (Eulexin) and bicalutamide (Casodex), fail to block completely the Adiol-induced androgen receptor (AR) transactivation in prostate cancer cells. Here, the authors report the development of a reporter assay to screen several selective steroids with anti-Adiol activity. Among 22 derivs./metabolites of dehydroepiandrosterone, the authors found 4 steroids [no. 4, 1,3,5(10)-**estratriene**-17.alpha.-**ethynyl**-3,17.beta.-diol; no. 6, 17.alpha.-**ethynyl**-androstene-diol; no. 8, 3.beta.,17.beta.-dihydroxy-androst-5-ene-16-one; and no. 10, 3.beta.-methylcarbonate-androst-5-ene-7,17-dione] that have no androgenic activity and could also block the Adiol-induced AR transactivation in prostate cancer PC-3 cells. Interestingly, these compds., in combination with hydroxyflutamide, further suppressed the Adiol-induced AR transactivation. Reporter assays further showed that these four anti-Adiol steroids have relatively lower glucocorticoid, progesterone, and estrogenic activity. Together, these data suggest some selective steroids might have anti-Adiol activity, which may have potential clin. application in the battle against the androgen-dependent prostate cancer growth.

IT 521-17-5, .DELTA.5-Androstenediol 52806-53-8,  
Hydroxyflutamide  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(androstenediol-induced androgen receptor transactivation suppression by selective steroids in human prostate cancer cells)  
RN 521-17-5 HCAPLUS  
CN Androst-5-ene-3,17-diol, (3.beta.,17.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 52806-53-8 HCAPLUS  
CN Propanamide, 2-hydroxy-2-methyl-N-[4-nitro-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



IT 53-43-0D, Dehydroepiandrosterone, metabolites 57-63-6

1159-66-6 3604-60-2 250163-05-4

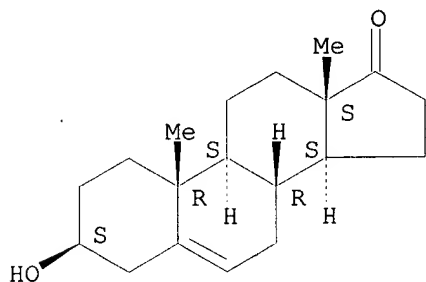
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(androstenediol-induced androgen receptor transactivation suppression by selective steroids in human prostate cancer cells)

RN 53-43-0 HCAPLUS

CN Androst-5-en-17-one, 3-hydroxy-, (3.beta.)- (9CI) (CA INDEX NAME)

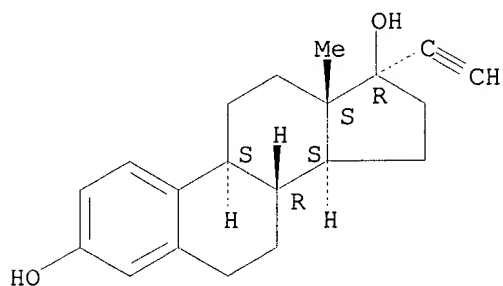
Absolute stereochemistry. Rotation (+).



RN 57-63-6 HCAPLUS

CN 19-Norpregna-1,3,5(10)-trien-20-yne-3,17-diol, (17.alpha.)- (9CI) (CA INDEX NAME)

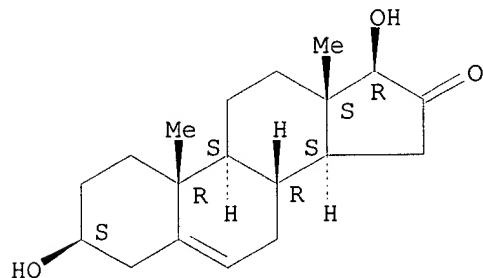
Absolute stereochemistry.



RN 1159-66-6 HCAPLUS

CN Androst-5-en-16-one, 3,17-dihydroxy-, (3.beta.,17.beta.)- (9CI) (CA INDEX NAME)

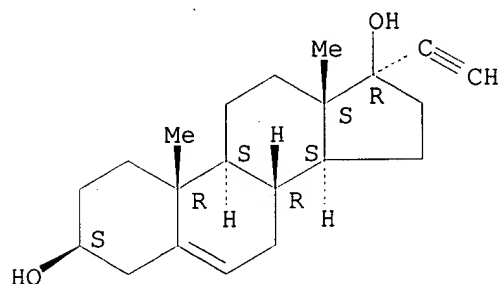
Absolute stereochemistry.



RN 3604-60-2 HCAPLUS

CN Pregn-5-en-20-yne-3,17-diol, (3.beta.,17.alpha.)- (9CI) (CA INDEX NAME)

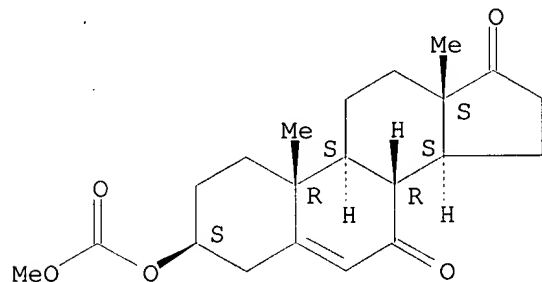
Absolute stereochemistry.



RN 250163-05-4 HCAPLUS

CN Androst-5-ene-7,17-dione, 3-[(methoxycarbonyl)oxy]-, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



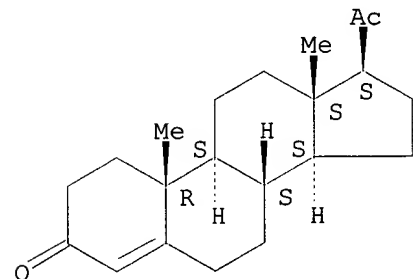
IT 57-83-0, Progesterone, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(androstenediol-induced androgen receptor transactivation suppression  
by selective steroids in human prostate cancer cells)

RN 57-83-0 HCAPLUS

CN Pregn-4-ene-3,20-dione (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

27

THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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